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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,199	09/09/2004	Andrew James Hickman	GB 020198	4279
24737 7590 05/23/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
LOVEL, KIMBERLY M				
ART UNIT		PAPER NUMBER		
2167				
MAIL DATE		DELIVERY MODE		
05/23/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/507,199

Applicant(s)

HICKMAN, ANDREW JAMES

Examiner

KIMBERLY LOVEL

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8 and 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1, 3-8 and 10-18 are rejected and claims 2 and 9 have been canceled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 January 2008 has been entered.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 8-14 and 17-18** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
5. **Claims 8 and 17** are directed towards an apparatus which includes a communicating means. However, it is noted that the use of the word "apparatus" does not inherently mean that the claim is directed towards a machine or article of manufacture. Each means of the claimed apparatus can be interpreted as comprising entirely of software per se according to one of ordinary skill in the art. Therefore, the claim language fails to provide the necessary hardware required for the claim to fall

Art Unit: 2167

within the statutory category of an apparatus.

According to MPEP 2106:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Since **claims 9-14 and 18** are dependent on claims 8 and 17, respectively and fail to overcome the deficiencies of claims 8 and 17, the claims are rejected on the same grounds as claims 8 and 17.

6. To allow for compact prosecution, the examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**7. Claims 1, 3, 6-8, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen (hereafter Nykanen) in view of US PGPub 2002/0188589 to Salmenkaita et al (hereafter Salmenkaita).**

**Referring to claim 1**, Nykanen discloses a method for automatically discovering web services comprising:

querying a known Universal Description Discovery and Integration (UDDI) server address periodically by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service

standard interface and (b) which can be used by the networked lightweight embedded CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by

Salmenkaita with the process of querying the registry disclosed by Nykanen. One would have been motivated to do so in order to increase user capability by providing all available services to the user.

While the combination of Nykanen and Salmenkaita (hereafter Nykanen/Salmenkaita) discloses the limitation of querying a known Universal Description Discovery and Integration (UDDI) server address periodically, Nykanen/Salmenkaita fails to disclose the further limitation of the querying occurring in a fully automatic manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the querying a known Universal Description Discovery and Integration (UDDI) server address periodically, in a fully automatic fashion. One would have been motivated to do so since the court has held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art (see *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)).

**Referring to claim 3**, Nykanen/Salmenkaita discloses a method according to claim 1, wherein said querying comprises transmitting a query in a predefined format, and wherein said structured query further contains a specific request, limiting the type of compliant web service identified [returning information that matches the supplied search criteria] (Nykanen: see [0061]).

**Referring to claim 6**, Nykanen/Salmenkaita discloses a method according to claim 3, and further comprising responding to said querying with a response comprising

the list of compliant web services limited according to the specific request [businessList result] (Nykanen: see [0061], lines 13-18 and [0077]).

**Referring to claim 7**, Nykanen/Salmenkaita discloses a method according to claim 6, and further comprising selecting via said networked lightweight embedded CE device a web service from said list of compliant web services limited according to the specific request and communicating the selected web service to said UDDI server address (Nykanen: see [0077], lines 14-16).

**Referring to claim 8**, Nykanen discloses an apparatus for automatically discovering web services comprising:

communicating means for querying a known Universal Description Discovery and Integration (UDDI) server address periodically, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded CE device to implement at least one of b(i)



providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One

would have been motivated to do so in order to increase user capability by providing all available services to the user.

While the combination of Nykanen/Salmenkaita discloses the limitation of querying a known Universal Description Discovery and Integration (UDDI) server address periodically, Nykanen/Salmenkaita fails to disclose the further limitation of the querying occurring in a fully automatic manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the querying a known Universal Description Discovery and Integration (UDDI) server address periodically, in a fully automatic fashion. One would have been motivated to do so since the court has held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art (see *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)).

**Referring to claim 10**, Nykanen/Salmenkaita discloses an apparatus according to claim 8, wherein said communicating means queries said UDDI server address by transmitting the structured query in a predefined format and wherein said communicating means is further arranged to include in said structured query a specific request, thereby limiting the type of compliant web service identified [returning information that matches the supplied search criteria] (Nykanen: see [0061]).

**Referring to claim 13**, Nykanen/Salmenkaita discloses an apparatus according claim 8, and further comprising a user interface for displaying information and for receiving user instructions [user wireless device 100] (Nykanen: see Fig 1).

**Referring to claim 14**, Nykanen/Salmenkaita discloses an apparatus according to claim 13, wherein said user interface is arranged to display the list of compliant web services and to receive a user selection of one or more of the displayed compliant web services [user wireless device 100] (Nykanen: see Fig 1).

**8. Claims 4, 5, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen in view of US PGPub 2002/0188589 to Salmenkaita et al as applied to respectively to claims 3 and 10 above, and further in view of US PGPub 2003/0061206 to Qian (hereafter Qian).**

**Referring to claims 4 and 11**, while Nykanen/Salmenkaita discloses a structured query, Nykanen/Salmenkaita fails to explicitly disclose the further limitation wherein said structured query contains a request for TV Anytime services, said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian teaches said structured query contains a request for TV Anytime services (See page 3, paragraph [0037] "The descriptor/metadata may follow some well known standards. Examples of these standards include...TV-Anytime metadata..."); said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform (See page 3, paragraph [0031] "Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the preference criteria or match with the personal preference information are sent to the

content assembler.” And see page 3, paragraph [0036] where different taxonomies relating to content format, etc are discussed.)

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because, as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said structured query contains a request for TV Anytime services, said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform.

**Referring to claim 5**, the combination of Nykanen/Salmenkaita and Qian (hereafter Nykanen/Salmenkaita/Qian) discloses a method according to claim 4, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

**Referring to claim 12**, Nykanen/Salmenkaita/Qian discloses an apparatus according to claim 11, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports

news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.”], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

**9. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen in view of US PGPub 2002/0188589 to Salmenkaita et al in view of US PGPub 2003/0061206 to Qian.**

**Referring to claim 15**, Nykanen discloses a method for automatically discovering web services comprising:

querying a known Universal Description Discovery and Integration (UDDI) server address periodically, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded

CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One

would have been motivated to do so in order to increase user capability by providing all available services to the user.

While the combination of Nykanen/Salmenkaita discloses the limitation of querying a known Universal Description Discovery and Integration (UDDI) server address periodically, Nykanen/Salmenkaita fails to disclose the further limitation of the querying occurring in a fully automatic manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the querying a known Universal Description Discovery and Integration (UDDI) server address periodically, in a fully automatic fashion. One would have been motivated to do so since the court has held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art (see *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)).

Nykanen/Salmenkaita fails to explicitly disclose the further limitations wherein the web services are TV Anytime web services and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian discloses discovering web services, including the further limitations wherein the web services are TV Anytime web services [The descriptor/metadata may follow some well known standards. Examples of these well known standards include ... TV-Anytime metadata ...] (see [0037]) and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform [Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the

preference criteria or match with the personal preference information are sent to the content assembler.] (see [0031] and [0036]).

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said query contains a request for TV Anytime services, said query further including an element specifying a set of taxonomies to which said service must conform.

**Referring to claim 16**, Nykanen/Salmenkaita/Qian discloses a method according to claim 15, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

**Referring to claim 17**, Nykanen discloses an apparatus for automatically discovering web services comprising:

communicating means for querying a known Universal Description Discovery and Integration (UDDI) server address periodically, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see



[0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables

the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One would have been motivated to do so in order to increase user capability by providing all available services to the user.

While the combination of Nykanen/Salmenkaita discloses the limitation of querying a known Universal Description Discovery and Integration (UDDI) server address periodically, Nykanen/Salmenkaita fails to disclose the further limitation of the querying occurring in a fully automatic manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the querying a known Universal Description Discovery and Integration (UDDI) server address periodically, in a fully automatic fashion. One would have been motivated to do so since the court has held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art (see *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)).

Nykanen/Salmenkaita fails to explicitly disclose the further limitations wherein the web services are TV Anytime web services and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian discloses discovering web services, including the further limitations wherein the web services are TV Anytime web services [The descriptor/metadata may follow some well known standards. Examples of these well known standards include ... TV-Anytime metadata ...] (see [0037]) and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform [Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the preference criteria or match with the personal preference information are sent to the content assembler.] (see [0031] and [0036]).

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said query contains a request for TV Anytime services, said query further including an element specifying a set of taxonomies to which said service must conform.

**Referring to claim 18**, Nykanen/Salmenkaita/Qian discloses an apparatus according to claim 17, wherein said set of taxonomies is at least one of authority name,

broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

### ***Response to Arguments***

10. Applicant's arguments filed as argument number 1 on page 11 and argument number 3 on page 13 of the Remarks have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's argument filed as argument number 2 on pages 11-12 have been fully considered but they are not persuasive. The applicant argues that the prior art teaches away from the claimed invention. The examiner respectfully disagrees. As stated above, transforming a manual process into an automatic process does not distinguish the claimed invention from the prior art. Therefore, the prior art does not teach away from the claimed invention.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY LOVEL whose telephone number is (571)272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/  
Supervisory Patent Examiner, Art Unit 2167

Kimberly Lovel  
Examiner  
Art Unit 2167

20 May 2008  
kml